



RM21400 Chassis Installation Reference Guide

Copyright

This document is copyrighted, 2002, by Chenbro Micom Co., Ltd. and all rights are reserved. Chenbro Micom Co., Ltd. reserves the right to make improvements to the products described in this document at any time without prior notice. Specifications are thus subject to change without notice.

No part of this document may be reproduced, copied, translated, or transmitted in any form or by any means without the prior written permission of Chenbro Micom Co., Ltd. Information provided in this document is intended to be accurate and reliable. However, Chenbro Micom Co., Ltd., assumes no responsibility for its use, nor for any infringements upon the rights of 3rd parties that may result from its use.

@ Copyright Chenbro Micom Co., Ltd.

All rights reserved

Nov. 2002

Version 1.0

Table of Contents

Chapter 1 General Information.....	4
1.1 Specification.....	4
1.2 Features.....	4
Chapter 2 SCSI Backplane Installation	6
2.1 Remove the top cover.....	6
2.2 Remove the fan bracket.....	6
2.3 Remove the HDD drawer.....	7
2.4 Install the SCSI backplane assembly.....	8
2.5 Connect LED and switch wires	11
2.6 Reattach the fan bracket and top cover	16

Chapter 1 General Information

1.1 Specification

Model Name		RM214	
Standard		EIA-RS310D	
M/B Form Factor		ATX/Extended ATX	
CPU Support		DP Xeon/AMD Athlon	
Dimension (D x W x H)		610mm x 430mm x 88.1mm 24" x 16.9" x 3.47"	
Drive Bays	HDD Tray		6
	Exposed	5¼"	1 x 5¼" drive + Slim CD-ROM
		3½"	1 x 3½" drive + Slim FDD
	Internal	3½"	N/A
PSU Type		350W ~ 600W PSU	
Slot Opening		3 or 6	
Cooling subsystem		3 x 8cm middle fans Optional 2 x 4cm rear fans Optional CPU cooler	
Indicators		LEDs for Power ON/OFF, HDD / LAN activity & fan failure	
Switch		Power ON/OFF & Alarm Reset	
Riser card (option)		32-bit or 64-bit PCI	
Backplane (option)		Ultra 160 SCSI or ATA 100 IDE	
Construction		SGCC	
Net weight		12kg (chassis only)	
Cubic feet		4	
Container information (Single packing)	20'	200	
	40'	424	

1.2 Features

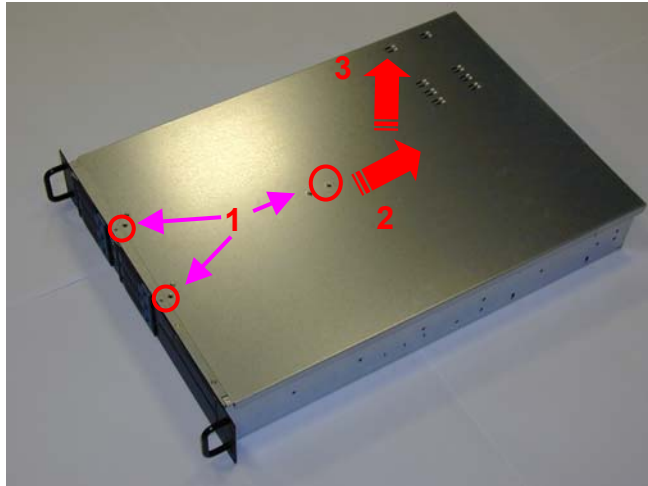
- **Easy Installation & Maintenance**
 - Screw-less installation for slim CD-ROM and slim FDD
 - 6 x 1" front access Ultra 160 Hot-Swap HDD trays
 - Optional 32-bit active PCI and passive 64-bit PCI riser card

- Compliance with Dual Intel Xeon or Dual AMD MP Server boards
- **Validated Thermal Solution**
 - Optional 4cm fan on rear panel for pulling out heated air efficiently.
- **System Monitoring**
 - Buzzer alarm for Fan failure and overheat warning
 - Support Alarm reset
- **Application Strength**
 - Designed for high density front end server
 - Ideal for NAS and RAID application and also for general purpose server

Chapter 2 SCSI Backplane Installation

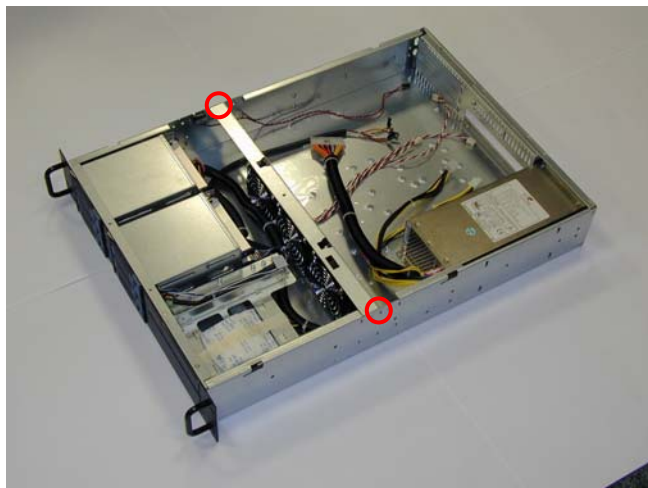
2.1 Remove the top cover

- 1 Remove three screws on top cover.
- 2 Push top cover backward and lift off the top cover.



2.2 Remove the fan bracket

- 1 Remove two screws on left & right side of fan bracket.
- 2 Lift off the fan bracket from chassis.
- 3 Set the fan bracket and screws aside for reattachment later.





2.3 Remove the HDD drawer

- 1 Push the blue door lock to right-hand side; the handle will be release automatically.



- 2 Use the handle to pull HDD drawer out a little bit.



- 3 Repeat the same operation for the other 5 drawers.

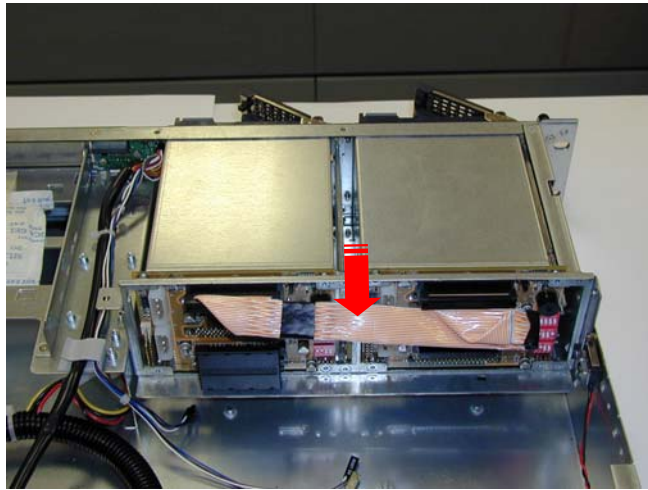


- 4 Rear view of HDD trays.

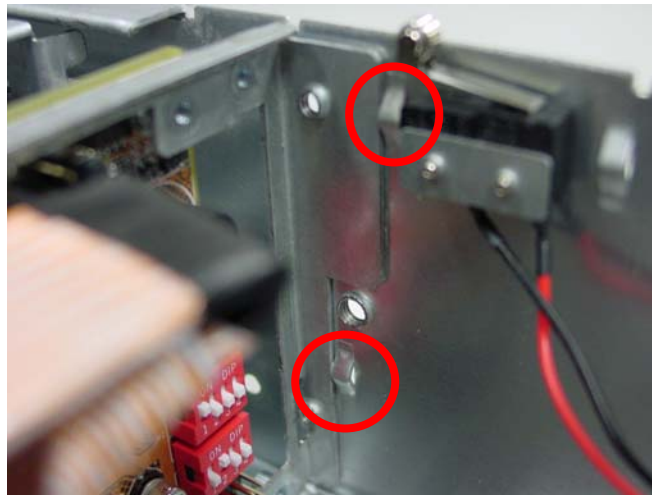
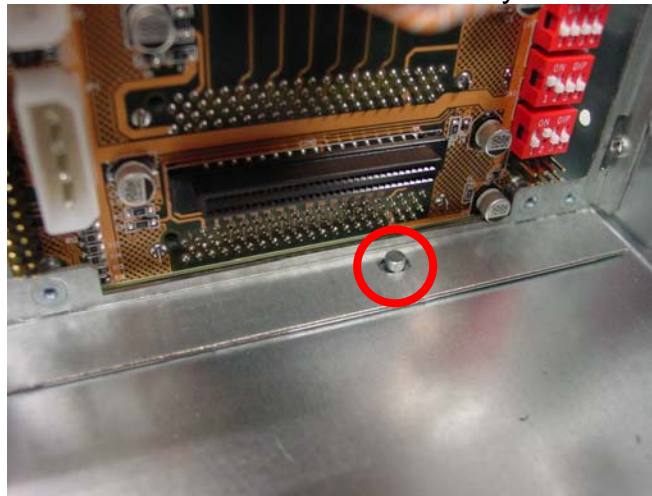


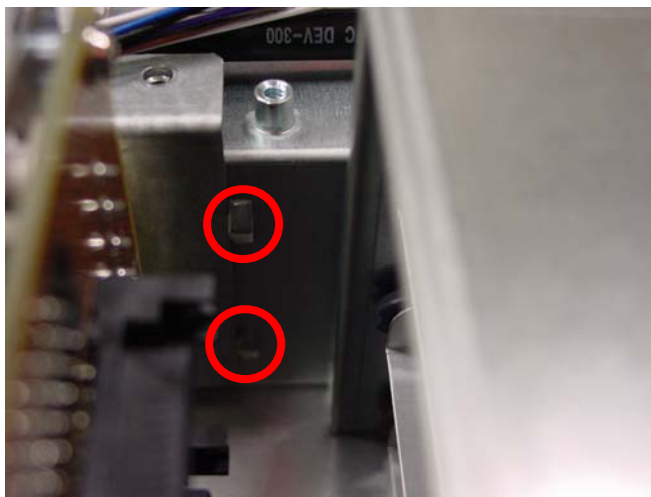
2.4 Install the SCSI backplane assembly

1. Insert the SCSI backplane assembly into chassis.

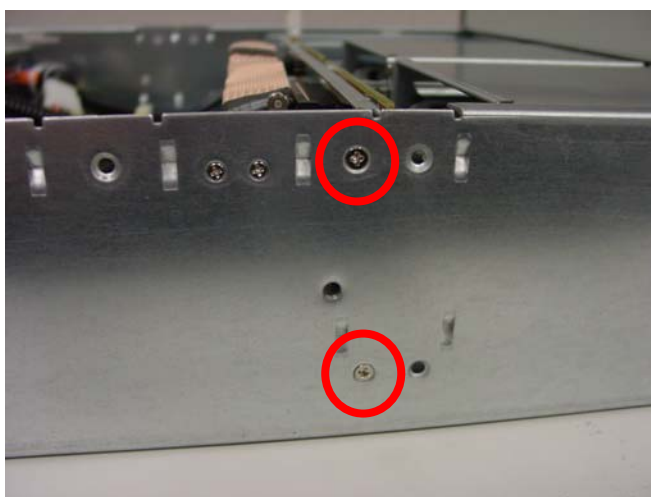
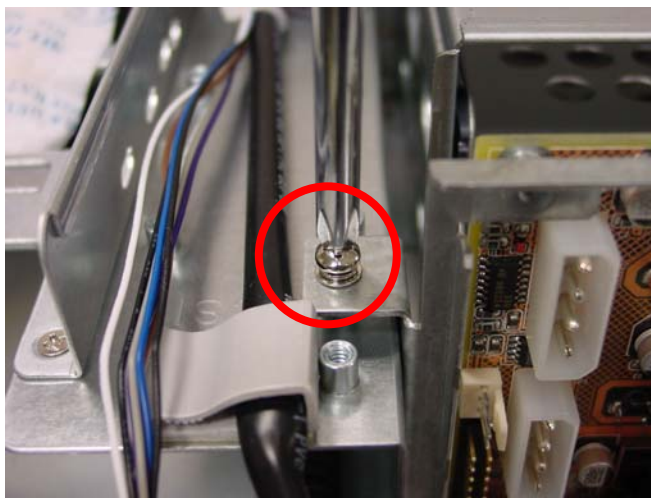


2. Check whether the SCSI bracket assembly is installed properly.





3. Fasten the screws to fix the SCSI backplane assembly.



4. Push the HDD drawers back to drive trays.



2.5 Connect LED and switch wires

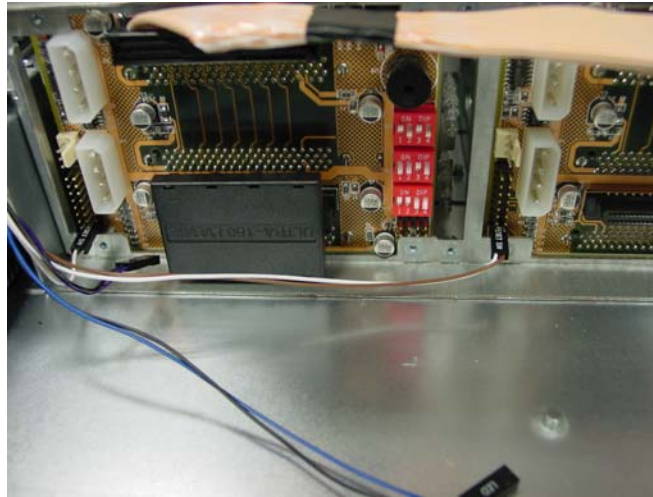
There is one 2 x 9 pin connector on left-bottom side on SC SI backplane. This connector provides several LED and switch connections for devices. The detail pin definition is listed below.

Pin 1	Device 1 Power LED -	Pin 2	Device 1 Power LED +
Pin 3	Device 1 Access LED +	Pin 4	Device 1 Access LED -
Pin 5	Device 2 Power LED -	Pin 6	Device 2 Power LED +
Pin 7	Device 2 Access LED +	Pin 8	Device 2 Access LED -
Pin 9	Device 3 Power LED -	Pin 10	Device 3 Power LED +
Pin 11	Device 3 Access LED +	Pin 12	Device 3 Access LED -
Pin 13	Fail LED -	Pin 14	Fail LED +
Pin 15	N/A	Pin 16	N/A
Pin 17	Reset -	Pin 18	Reset +

1. Check the pin number of “Reset SW” on connector.

Pin 1	Device 1 Power LED -	Pin 2	Device 1 Power LED +
Pin 3	Device 1 Access LED +	Pin 4	Device 1 Access LED -
Pin 5	Device 2 Power LED -	Pin 6	Device 2 Power LED +
Pin 7	Device 2 Access LED +	Pin 8	Device 2 Access LED -
Pin 9	Device 3 Power LED -	Pin 10	Device 3 Power LED +
Pin 11	Device 3 Access LED +	Pin 12	Device 3 Access LED -
Pin 13	Fail LED -	Pin 14	Fail LED +
Pin 15	N/A	Pin 16	N/A
Pin 17	Reset -	Pin 18	Reset +

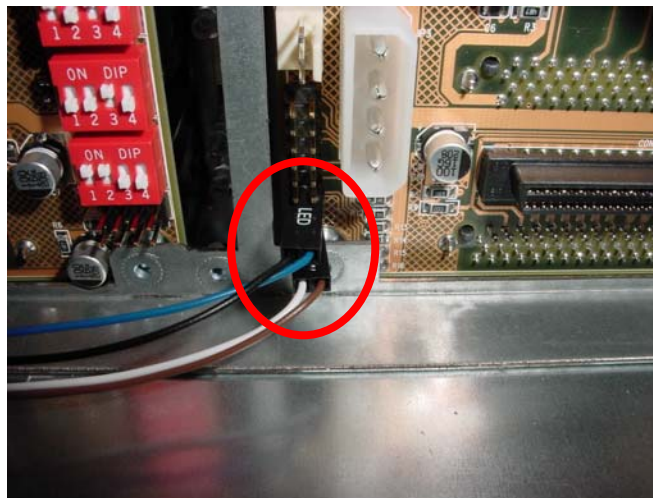
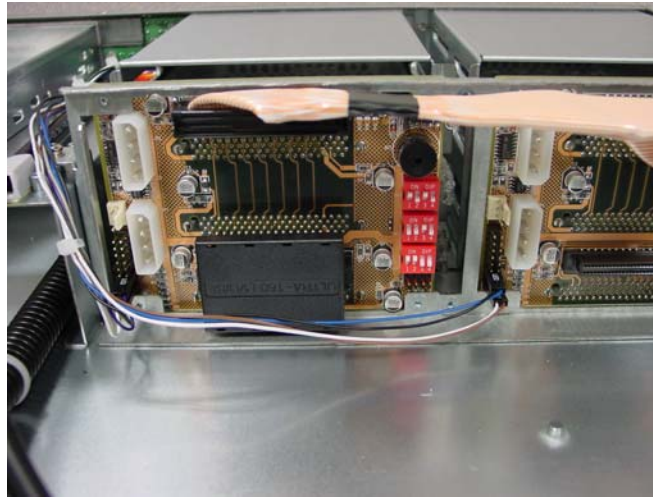
2. Plug “Reset SW” connector into pin 17 & 18 on connector.
3. Plug another “Reset SW” connector into another SCSI backplane.



4. Check the pin number of “Fail LED” connector.

Pin 1	Device 1 Power LED -	Pin 2	Device 1 Power LED +
Pin 3	Device 1 Access LED +	Pin 4	Device 1 Access LED -
Pin 5	Device 2 Power LED -	Pin 6	Device 2 Power LED +
Pin 7	Device 2 Access LED +	Pin 8	Device 2 Access LED -
Pin 9	Device 3 Power LED -	Pin 10	Device 3 Power LED +
Pin 11	Device 3 Access LED +	Pin 12	Device 3 Access LED -
Pin 13	Fail LED -	Pin 14	Fail LED +
Pin 15	N/A	Pin 16	N/A
Pin 17	Reset -	Pin 18	Reset +

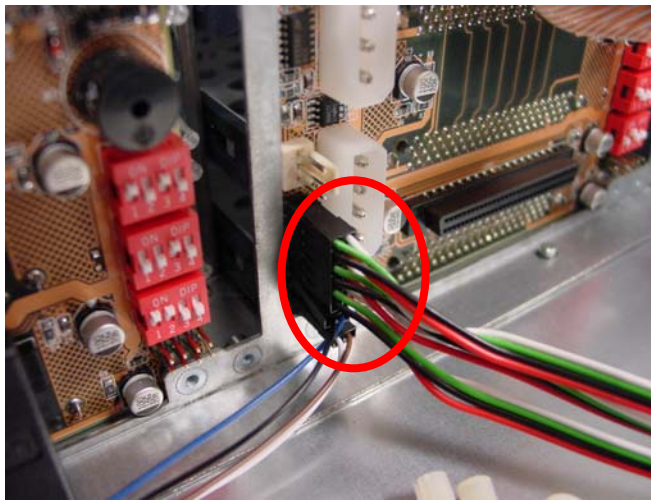
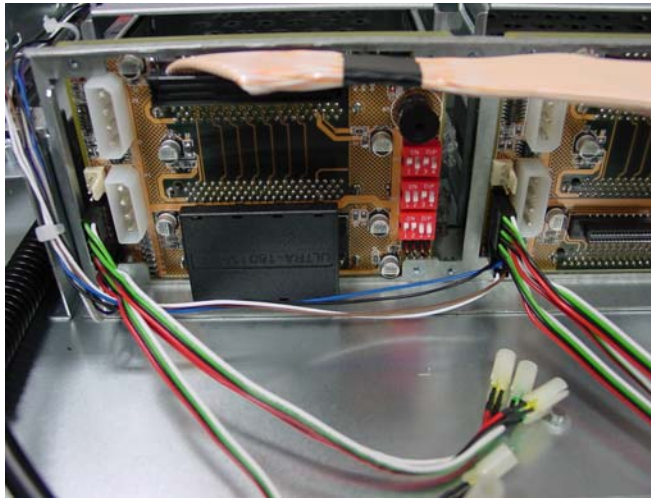
5. Plug “LED” connector into pin 13 & 14. The black wire indicates the ground pin of LED.
6. Plug another “LED” connector into another SCSI backplane.



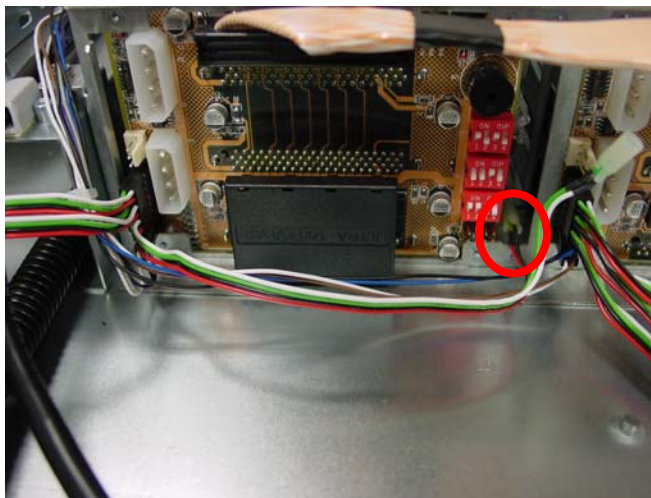
7. Check the pin numbers of HDD LED connectors.

Pin 1	Device 1 Power LED -	Pin 2	Device 1 Power LED +
Pin 3	Device 1 Access LED +	Pin 4	Device 1 Access LED -
Pin 5	Device 2 Power LED -	Pin 6	Device 2 Power LED +
Pin 7	Device 2 Access LED +	Pin 8	Device 2 Access LED -
Pin 9	Device 3 Power LED -	Pin 10	Device 3 Power LED +
Pin 11	Device 3 Access LED +	Pin 12	Device 3 Access LED -
Pin 13	Fail LED -	Pin 14	Fail LED +
Pin 15	N/A	Pin 16	N/A
Pin 17	Reset -	Pin 18	Reset +

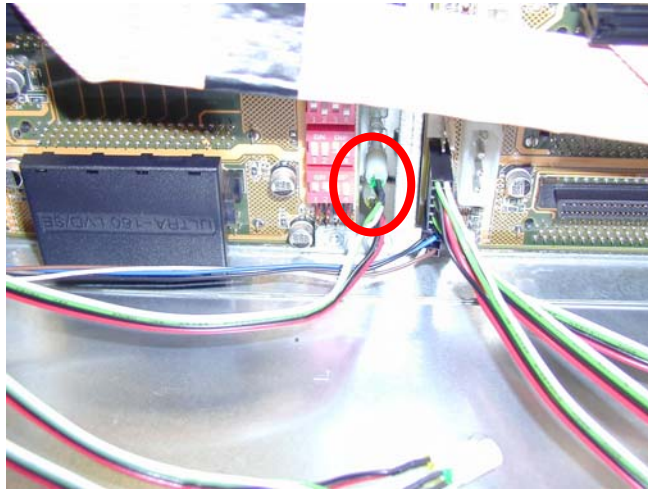
8. Plug HDD LED cables into connectors properly. The green wire should be at the upper side. The LED cables can be separated to three groups. Each group contains one yellow LED (HDD access) and one green LED (power).



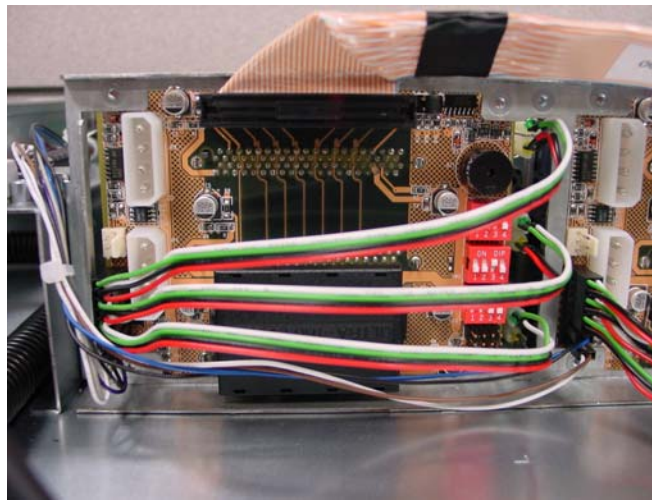
9. Plug the LED with red wire to the lowest LED len.



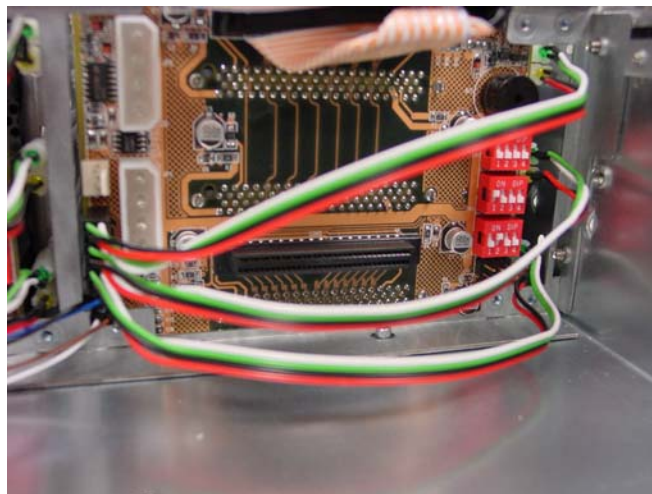
10. Plug the green LED with green wire to the second lowest LED len.



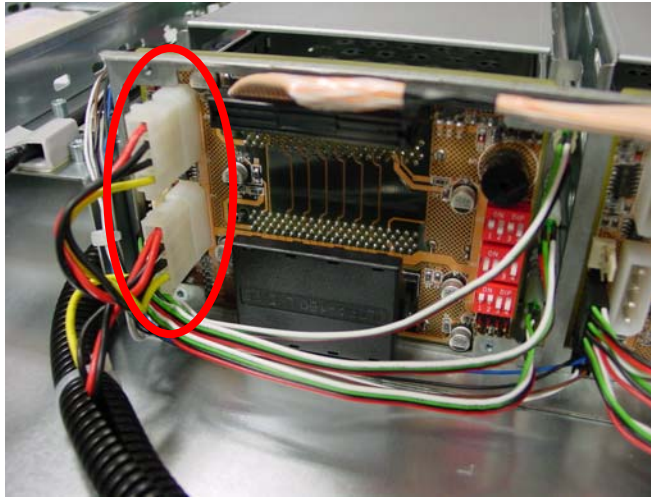
11. Repeat step 9 & 10 till all LED are installed properly.



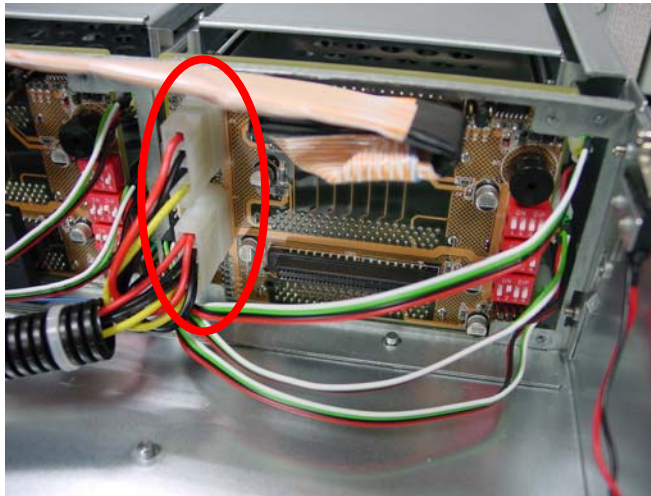
12. Use the same way to install the LED on another SCSI backplane. Till now, the installation of LED is completed.



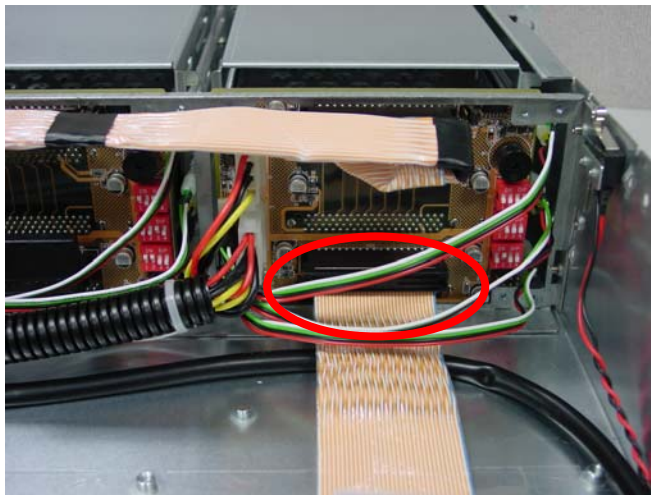
13. Plug the power connectors to SCSI backplane.



14. Plug the power connectors for another SCSI backplane.

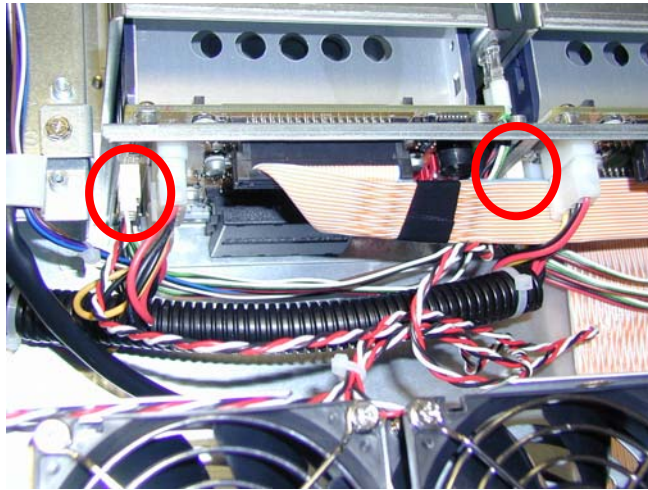


15. Attach the SCSI cable to the unused SCSI connector.



2.6 Reattach the fan bracket and top cover

1. Plug two of the fan power connectors on fan bracket onto SCSI backplane. The left fan connector should be connected to M/B.



2. Reattach the fan bracket and arrange the cables properly.



3. Fasten the screws that are detached in section 2.2.
4. Put the top cover back and fasten the screws. Please check section 2.1 for detail locations of screws. The installation of SCSI backplane is finished now.

